

REMARKS

Reconsideration is respectfully requested. Claims 7, 8, 10, 25, 26, 28, 31, 49, 50, 51 and 52 are pending. Claims 1-6, 9, 11-24, 27, 29-30, 32-48 and 53 are canceled. Claims 7, 8, 25, 26 and 49-52 are amended. No new matter has been added due to the amendments. Amendments to and cancellation of the claims do not affect inventorship.

Applicants have not dedicated or abandoned any unclaimed subject matter and moreover have not acquiesced to any rejections made by the Patent Office. Applicants reserve the right to pursue prosecution of any presently excluded claim embodiments in future continuation and/or divisional applications.

Claim Amendment

Claims 7, 8, 25, 26 and 49-52 are amended for technical clarity. No new matter has been added as a result of the amendments.

Objection to the Specification

The Examiner has objected to the Specification "as being inconsistent in identifying the amino acid sequence of the atomic coordinate listing of Figure 3 as SEQ ID NO:5...." Applicants respond as follows:

The Specification has been amended at paragraph [0049] to clarify that the structure coordinates set forth in Figure 3 represent the coordinates of a crystal that comprises three molecules of HDAC-2 protein, where the HDAC-2 molecule has the sequence of residues shown in SEQ ID NO:5; however structure coordinates for all of the residues is not reported. As stated in paragraph [0115] of the Specification, "[i]n one embodiment, described in Example 2, crystals of an HDAC-2-Zn²⁺-TSA complex were obtained where HDAC-2 has the sequence of residues shown in SEQ. ID NO: 5." As further stated in paragraph [0120], the crystal contains three HDAC-2 molecules referred to as chain A, chain B and chain C, and Figure 3 contains structure coordinate data for all three chains. For chain A (see FIG. 3A – FIG. 3FFF - amended drawings filed on March 5, 2007), structure coordinates for amino acid residues 1-11 and 379-409 (according to the numbering used for SEQ. ID NO: 5) are not reported. For chain B (FIG. 3FFF to FIG. 3KKKKK), structure coordinates for amino acid residues 1-13 and 379-409 are not reported. For chain C (FIG. 3LLLLL to FIG. 3BBBBBBB), structure coordinates for amino acid residues 1-13 and 379-409 are not reported.

Objection to the Claims

Claim 25 has been objected to. Applicants have amended claim 25 in accordance with the Examiner's suggestion.

Claim 45 has been objected to. Applicants have canceled claim 45 thus rendering the rejection moot.

Claim 49 has been objected to. Applicants have amended claim 49 in accordance with the Examiner's suggestion.

In light of the above claim amendments, withdrawal of the objections to the claims is respectfully requested.

Claim Rejection - 35 U.S.C. § 112, First Paragraph- New Matter

Claims 8, 10, 26, 28 and 46 stand rejected under 35 U.S.C. § 112, first paragraph, as containing new matter. Applicants traverse as follows:

Claim 46 has been canceled thereby rendering the rejection moot with respect to this claim. With respect to amended claims 8 and 26, which recite the limitation "wherein the protein crystal comprises three protein molecules", support for the limitation can be found in the Specification at paragraph [0115], [0118] and [0120]. Taken together, the disclosure in the cited paragraphs, describe a HDAC-2 protein crystal comprising three HDAC-2 molecules designated as chain A, chain B and chain C. Additional support for a protein crystal comprising 3 protein molecules can be found in Figure 3, which sets forth the atomic structure coordinates of a protein crystal comprising three HDAC-2 molecules that are designated as chain A, chain B and chain C.

With respect to claims 10 and 28 that recite the limitation "a resolution of a value equal to or less than 3.0 Angstroms", support for the limitation can be found in the Specification at paragraph [0007], which recites that "the protein crystal may also diffract X-rays for a determination of structure coordinates to a resolution of 4Å, 3.5Å, 3.0Å or less." (emphasis added)

Claim Rejection - 35 U.S.C. § 112, First Paragraph- Written Description

Claims 7, 8, 10, 25, 26, 28, 31, 44, 45-46, and 49-52 stand rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. Applicants respond as follows:

Claims 45-46 have been canceled, thereby rendering the rejection moot with respect to these claims. Claims 7 and 25 have been amended to recite that the protein in the formed protein crystal is in complex with trichostatin. The invention as set forth in the amended claims is adequately described in the Specification to fulfill the written description requirement under 35 U.S.C. § 112, first paragraph. Applicants therefore request withdrawal of the instant rejection.

Claim Rejection - 35 U.S.C. § 112, First Paragraph- Enablement

Claims 7, 8, 10, 25, 26, 28, 31, 44, 45-46, and 49-52 stand rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the enablement requirement. Applicants respond as follows:

Claims 45-46 have been canceled, thereby rendering the rejection moot with respect to these claims. Claims 7 and 25 have been amended to recite that the protein in the formed protein crystal is in complex with trichostatin. The invention as set forth in the amended claims is fully enabled in the Specification to fulfill the enablement requirement under 35 U.S.C. § 112, first paragraph. Applicants therefore request withdrawal of the instant rejection.

Claim Rejection - 35 U.S.C. § 102

Claims 44 and 53 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Pat. No. 7,169,801 to Bressi et al. Applicants respond as follows.

Claims 44 and 53 have been canceled thereby rendering the instant rejection moot. Applicants therefore request withdrawal of the instant rejection.

Claim Rejection - 35 U.S.C. § 101

Claim 44 stands rejected under 35 U.S.C. § 101 on the basis that the claimed the invention is directed to non-statutory subject matter.

Claim 44 has been canceled thereby rendering the instant rejection moot. Applicants therefore request withdrawal of the instant rejection.

Claim Rejection- Double Patenting

Claims 45 and 46 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 22-31 and 42-51 of co-pending Application No. 10/826,134.

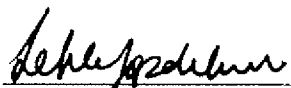
Claims 45 and 46 have been canceled thereby rendering the instant rejection moot. Applicants therefore request withdrawal of the instant rejection.

CONCLUSION

In view of the foregoing amendments and arguments, it is believed that all claims now pending in this application are in condition for allowance. Should the Examiner not agree, the Applicant respectfully asks the Examiner to contact the undersigned at the phone number below to discuss any remaining issues and accelerate the examination and allowance of this application. Authorization is granted to charge any outstanding fees due at this time for the continued prosecution of this matter to Morgan, Lewis & Bockius LLP Deposit Account No. 50-0310 (Client Matter No. 067450-5013US).

Respectfully submitted,

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